

ABSTRACT

The invention relates to heparinase III and mutants thereof. Modified forms of heparinase III having reduced enzymatic activity which are useful for a variety of purposes, including sequencing of heparin-like glycosaminoglycans (HLGAGs),
5 removing active heparan sulfate from a solution, inhibition of angiogenesis , etc. have been discovered according to the invention. The invention in other aspects relates to methods of treating cancer and inhibiting tumor cell growth and/or metastasis using heparinase III, or products produced by enzymatic cleavage by heparinase III of HLGAGs.